





# POSITION PAPER



### COMMISSION ON EDUCATIONAL PLANNING

Suite 400 - 11010 - 142 Street, EDMONTON 50, Alberta

A CONCEPTUALIZATION OF

CURRICULUM FOR THE SEVENTIES,

WITH RECOMMENDATIONS

by

ROBERT ANDERSON and

JANET EMIG

ATA LIBRARY 11010 - 142 Street NW Edmonton, AB T5N 2R1

This position paper is one of a series prepared by scholar-experts at the request of the Commission on Educational Planning. Though it has been reproduced and distributed by the Commission, the views expressed in it are those of the author(s).

The purposes of these papers are to bring to the attention of the Commission informed points of view regarding a series of issues, to suggest basic concepts of principles to guide planning and development at all levels of education in the years to come, and to project contemporary thought into the future.

This paper is not to be reproduced in any form without the permission of the author(s) and the Commission on Educational Planning.



Ref 371.9044 A549 A CONCEPTUALIZATION OF CURRICULUM FOR THE SEVENTIES, WITH RECOMMENDATIONS

Position Paper on Curriculum for the Commission on Educational Planning

by

# Robert Anderson and Janet Emig

Who can learn what, from whom, where, by what modes, and under what circumstances? The co-authors of this position paper believe that the summed answer to the six components of this question define any curriculum. Consequently, scrutiny of each of these six Wh-components--

Who can learn?

What can he learn?

From whom can he learn?

Where can he learn?

By what modes can he learn?

Under what circumstances can he learn?

--will form the discussion for a conceptualization of the curriculum for the decade of the seventies. 1 Concomitant recommendations form an integral part of the discussion.

The traditional answer of this six-part question within the

Province of Alberta has been that children between the ages of six and

twenty-one can learn discrete subject-matters in schools and universities

These categories, of course, are not mutually exclusive: for example, in this position paper we will show that a response to who can learn may equally be an answer to where can one learn; and a response to who can learn may equally deal simultaneously with under what circumstances does one teach.

from teachers older than twenty-one. It should be obvious that such a definition of learning/teaching is a highly over-specific matrix of variables since it confines learning/teaching only to those transactions between teachers and children, both defined in large part by age, that occur in loci known as schools and universities.

Major modern thinkers find such definitions of what education is or of what learning is (terms not necessarily synonymous) not only overspecific but dangerously and self-defeatingly narrow. In Culture and Commitment, for example, the anthropologist Margaret Mead suggests that all cultures of the world have entered a new era. 2 In the past, culture was almost exclusively transmitted by post-figurative arrangements--that is, by the older members initiating the younger into the values and mores of a given society. Major qualitative world changes--the transformation of the earth into the global village; the possibility, if not inevitability, of death of the species by bomb or pollution--now make it presumptuous for the older to retain their traditional and unilateral role of seer and guide. According to Mead, the true source of generational difference is that, while persons born before World War II have shifted in their views to accommodate these new concepts of the world, the generation born since World War II possess only these perceptions and know no others. This difference in perceiving marks a quantitative break between generations unique in the history of civilization.

<sup>&</sup>lt;sup>2</sup>Margaret Mead, <u>Culture</u> and <u>Commitment</u> (New York: Doubleday, 1970).

If the young possess a unique and valuable view, it follows that cultures must move from <u>post-figurative</u> arrangements, whenever they are anachronistic, to <u>co-figurative</u>-peers teaching peers--and, even more revolutionary, <u>pre-figurative</u> arrangements, with the chronologically younger teaching the chronologically older.

Members of the younger generation not only possess different perceptions of the world; they possess as well a major shift in values. This generation believes, or assuredly behaves as if it believes, in the professed values of our society—the uniqueness of the individual, the integrity and efficiency of government, and the solution of national and international conflicts by non-violent means. Their disenchantment and rage with the hypocrisies and gross failures of their elders cannot be dismissed as a collection of localisms: they are a fundamental, world—wide phenomenon that will not disappear nor dissipate no matter how assiduously they are ignored or punished.

It should be obvious from the concerns and language of these first few paragraphs that the reader will not find in this position paper adherence to the concepts and language of Tylerian and Bloomian curriculum theory, currently, despite its relative age and partial repudiation by the authors themselves, the most popular model of curriculum theory on the North American continent. Indeed, the model is so popular that it has been erroneously regarded as a set of curricular universals rather

Ralph W. Tyler (prep.), <u>Basic Principles of Curriculum and Instruction</u> (Chicago: The University of Chicago Press, 1950).

than, correctly, as a portion of education's response to the priorities of a specific historical period—the post-World War II period from 1950 to, approximately, 1963.

This model acknowledges four basic tasks in the teaching/learning interchange:

- a. the development of objectives;
- b. the selection of learning experiences;
- c. the organization of these learning experiences; and
- d. the evaluation of these experiences.

Approaching curriculum through this model locks one into a questionable metaphor about what learning is—a form of benign cognitive engineering—as well as into a language system whose highly specific lexicon and syntax may well determine both the questions that can be asked and the answers that can be found. Curriculum theory has become trapped within one conceptualization, with its own particular language system.

What are some of the assumptions behind the Tylerian model of curriculum?

- a. Education is a post-figurative phenomenon.
- b. Education is a rational process.
- c. Learning primarily involves a cognitive transaction: questions of value and of affect are of secondary importance, if valuable at all.
- d. The success or failure of learning is almost immediately measurable by quantitative means.

Such a model may have been a logical response to an era--the post-Sputnik preoccupation with training students to process larger and

larger bodies of information. This position paper is dedicated in part, however, toward demonstrating the inadequacy of this model of curriculum for the decade of the seventies.

In point of history, this model of curriculum dates back at least to the work of Franklin Bobbitt in <u>The Curriculum</u>, written in 1918, and <u>How to Make a Curriculum</u>, written in 1924, which presents precursors to today's behavioral objectives. Herbert Kliebard, who points out these origins, notes:

About all we have done on the question of the role of objectives in curriculum development since Bobbitt's day is, through some verbal flim-flam, convert Bobbitt's 'ability to' into what are called behavioral or operational terms and to enshrine the whole process in what is known as the 'Tyler rationale.'

The essence of the 'Tyler rationale' is not, it seems to me, the curriculum planning steps that are frequently associated with it, but the embodiment of a production model of how the process of teaching and learning proceeds. In applying the model, we are asked in effect to state certain design specifications for how we want the learner to behave, and then we attempt to arrive at the most efficient methods for producing that product quickly and, I suppose, cheaply. A curricular objective in this sense is only a way of stating what someone will do or behave like once we get through with him. We are even urged to state objectives in the most precise terms in order to make it easier to tell whether we have succeeded or not. Despite the significant efforts of a few curriculum theorists, such as Huebner and Macdonald, major alternatives to the 'design specification' view of the role of curricular objectives have not emerged. As a matter of fact, the production model along with efficiency as the criterion of success has achieved new prominence and popularity under the influence of the burgeoning educational technology.<sup>5</sup>

Herbert M. Kliebard, "Historical Scholarship: Persistent Curriculum Issues in Historical Perspective," 1970/Educational Comment: A Search for Valid Content for Curriculum Courses, ed. Edmund C. Short (Toledo, Ohio: The University of Toledo, College of Education, 1970).

<sup>&</sup>lt;sup>5</sup>Kliebard, no pagination.

Kliebard also states that in theorizing about the curriculum many of us have ignored the major philosophical tradition in education running from Dewey to R. S. Peters that insists that there are intrinsic values in the learning/teaching interchange and that objectives evolve as learning occurs.

Teachers of English through their international organization, the N.C.T.E., have recently indicated their marked reservations about the legitimacy of the Tyler rationale and of behavioral objectives for the teaching of English.

Following the N.C.T.E. Convention in Washington, D.C. in November, 1969, the Council issued this resolution:

A Resolution Passed by the National Council of Teachers of English at the Fifty-ninth Annual Meeting, 1969

ON THE NEED FOR CAUTION IN THE USE OF BEHAVIORAL OBJECTIVES IN THE TEACHING OF ENGLISH

BACKGROUND: The Commission on the English Curriculum has recognized that the growing practice of proposing that behavioral objectives be defined for the language arts, and that these objectives be employed in testing, leads to a complex, demanding and possibly educationally dangerous activity. Expert witnesses on the goals of English, in conference with the Commission, have echoed the Commission's concern that real damage to English instruction may result from definitions of English in the behavioral mode; and advise that the methods of measuring the attainment of behavioral objectives are still too imperfect to justify the extensive use of comprehensive behavioral definitions of English.

While the Commission advocates that all teachers be openminded about possible alternatives for defining and structuring the English curriculum--including the use of behavioral objectives--at the same time it urges caution and accordingly presents the following resolution:

Resolved, That those who propose to employ behavioral objectives be urged to engage in a careful appraisal of the possible

benefits and the present limitation of behavioral definitions of English with reference to the humanistic aims which have traditionally been valued in this discipline.

And be it further Resolved, That those in the profession who do undertake to write behavioral objectives (a) make specific plans to account for the total English curriculum; (b) make an intention to preserve (and, if need be, fight for) the retention of important humanistic goals of education; and (c) insist on these goals regardless of whether or not there exist instruments at the present time for measuring the desired changes in pupil behavior.

In addition, the N.C.T.E. has just published (June 1, 1970) a collection of essays "On Writing Behavioral Objectives for English" edited by John Maxwell and Anthony Tovatt. See especially "On Hunting, Fishing and Behavioral Objectives" by Robert Hogan, Executive Secretary of the N.C.T.E.

## Who Can Learn?

The basic premise of this position paper is that any person, especially any child, should be given under government auspices the opportunity to learn as much as he is genetically able. Thus far, the Province of Alberta has managed to ignore the basic finding of over a hundred years of study into child development that the most significant period of learning in human life is from birth to four years of age. The educational practices of the province proceed as if Comenius, Froebel, Rousseau, Montessori and Pestalozzi, Bloom, Bruner, Chomsky, Freud, Hunt, Piaget and White never lived and wrote. 6

<sup>6</sup>Noam Chomsky, <u>Cartesian Linguistics</u> (New York: Harper and Row, 1966); Jerome S. Bruner, <u>Toward a Theory of Instruction</u> (Cambridge: Harvard University Press, 1966); Benjamin Samuel Bloom, <u>Stability and</u>

In the seventeenth century Comenius made the following remark upon the importance of these very early years: "Schooling . . [ought] to be organized along the plan of a Mother or nursery school for children up to the age of six." More than 300 years later, in 1968, distinguished child psychologists from Russia, Japan, France, England and the United States made an analogous, but far stronger, statement in the UNESCO Conference on Early Childhood:

[It is] Not only the child six years and older who profits from appropriate and coherent teaching but the pre-school period is of decisive importance. It may well be that the most important period, from the point of view of the development of intellectual capacities, seems to be approximately around the age of four.

We can continue to ignore the formidable implications of this wholly persuasive body of knowledge only at the increasing deprivation of our single most potentially valuable asset, the very young child.

Change in Human Characteristics (New York: Wiley, 1964); Jean Piaget, Six Psychological Studies, trans. Anita Tenzer and ed. David Elkind (New York: Vintage Books, 1968); Irene M. Lilley (ed.), Friedrich Froebel: A Selection from His Writings (New York: Cambridge University Press, 1967); Sigmund Freud, The Basic Writings of Sigmund Freud, trans. and ed. Dr. A. A. Brill (New York: The Modern Library, 1938); Freud, On Creativity and the Unconscious, selec. Benjamin Nelson (New York: Harper, 1958); Jean Jacques Rousseau, Emile, selec. and trans. Rosalie Feltenstein (Brooklyn: Barron's Educational Series, 1950); Rousseau, The Confessions of Jean Jacques Rousseau (New York: Modern Library, n.a.); Henry Barnard (ed.), Pestalozzi and Pestalozzianism (second edition; New York: F. C. Brownell, 1859); Joseph McVicker Hunt, Intelligence and Experience (New York: Ronald Press Company, 1961); Sheldon H. White, "The Learning Maturation Controversy: Hall to Hull," Merrill-Palmer Quarterly, Vol. 14, No. 3 (1968), pp. 187-196.

<sup>&</sup>lt;sup>7</sup>John Amos Comenius, <u>The Great Didactic</u>, Chapter 28, 3, p. 256. Published in Latin 1657-8.

<sup>8</sup>Colloquium on Early Childhood (UNESCO, 1968). Quoted in Pierre Lepage, "Les Ecoles Maternelles," Paris-Normandie (Fevrier 3, 1970), pp. 10-11.

Thus far the province has also made no more than a beginning in its providing for the education of its genetically different children. The usual percentage of educationally different children within any population is estimated to be 10-15 per cent. According to the best figures our team could obtain, the greatest number of handicapped children served thus far by special educational services provided by the province is less than 1 per cent. Nor has the province made more than a gesture toward the academically gifted students in its schools and universities. What special opportunities and incentives are truly offered students in our schools and universities? Canada cannot afford (the verb is carefully chosen) not to train its own intellectual leadership.

The fourth group of learners who deserve special immediate concern are the minority groups of the province--we speak here of Indians, Eskimos, newly arrived immigrants, and women. The current opportunities provided for these groups continues to be inadequate.

The fifth group of learners--perhaps the most important of all-must be the adult leaders of our society. If necessary, unique strategies
must be devised to help them comprehend the urgency of problems and the
sense of values to establish priorities, as well as the flexibility to
assume new roles. Their persisting failure of comprehension may be the
single most important indictment of traditional schooling and its emphases.

Recommendations. If the first four or five years of life are the most crucial years for learning for all children, it follows that the

Province of Alberta should make the widest possible provisions for learning by children of these ages. We, therefore, make the following recommendations regarding early childhood (following the convention throughout the literature, we of course use the term here as meaning the ages of two to seven):

- a. We recommend required kindergarten for all five-year-old children in Alberta. Kindergarten is not a frill: properly conducted, it is more important than any subsequent year of schooling.
- b. We recommend as well the establishment of voluntary and free nursery schools for all children. If budgetary considerations prevent a universal system of nursery schools, we recommend that they be initiated in whatever geographic areas are most accessible to the children of families in the lower socio-economic range of society.
- c. Both of these recommendations have clear implications for teacher-training. The study of early childhood must be required for all who enter teaching, no matter at what level they plan to teach. Early childhood must be a required <u>major</u> for all who plan to teach children from the ages of two through eight.

We make the following recommendations regarding exceptional children:

- a. Since it is impracticable to expect that graduate programs in special education across the four universities can provide such training, undergraduate programs in special education are needed to train the necessary number of classroom teachers.
- b. We recommend that programs for exceptional children be provided as integral parts of existing schools throughout the province in accurate

ratio to the need.

c. We recommend that the section on Special Education of the Education Act be revised from its current ambiguous wording so that it is ineluctably clear that the Province of Alberta cares enough about its exceptional children to provide explicit and generous support for their learning.

Of all the minority groups (we speak here of status, not numbers), the largest and most pervasive is women.

We recommend that those agencies responsible for teacher education provide wider professional opportunities for women by instigating far more imaginative and flexible arrangements whereby qualified married women who want to teach can find programs to prepare them in a manner that considers their special circumstances. Our hope is that other agencies responsible for professional training in law, medicine, and other fields will then follow the lead of education.

By these statements we do not intend to convey any lack of concern for the Indians and Metis; rather, we wish instead to convey our respect and belief that these groups are wholly capable of determining and formulating educational arrangements most propitious to their own cultures, as their fine presentations to the Worth Commission have made clear.

## What Can Be Learned? What Must Be Learned?

In the vital sense--literally--the survival of life on earth must

<sup>9</sup>Alberta Provincial Government, <u>Bill #35</u>: <u>An Act Respecting</u>
<u>Schools</u> (presently before the House, March 1970), Section 139 (Edmonton, Alberta). Sections 131 and 135 also have a bearing on Special Education.

be the heart, the essence of the curriculum in the seventies and, quite possibly, thereafter. If survival is basic in the curriculum, it should be inescapable that Everyman must be the learner, even the world leaders who seem to have failed to comprehend that the earth may already be dying on an inexorable timetable that cannot be reversed. The study of the relationship between man and his environment, both natural and technological, will help man to understand the consequences of his actions. How sulfur-laden fuel oil burned in England produces an acid rain that damages the forests of Scandinavia. How DDT used by a tobacco farmer in North Carolina turns up in the fat of an Eskimo living in Alaska. Why a farm subsidy which helps one group of individuals can force a group of other individuals to riot. Here is a major instance where pre-figurative learning/teaching will occur: indeed the young throughout the world are already assuming the roles of leadership in the fights against all forms of pollution including war.

Profoundly, aesthetic education is a crucial component in the curriculum of survival. The purpose of aesthetic education is to develop the imagination and the sensibilities of the learner, and it is not exaggerated nor neurotic to attribute world crises to the human failure or refusal to imagine even the possibility of its own demise. Hannah Arendt may be one of the most eloquent contemporary writers on the personal price for the failure of imagination:

Without this kind of imagination, which actually is understanding, we would never be able to take our bearings in the world. It is the only inner compass we have. If we want to be at home on earth, even at the price of being at home in this century, we must

try to take part in the interminable dialogue with its essence. 10

Charles Horton Cooley, a founder of American sociology, notes the social dimensions of this failure:

the imaginations which people have of one another are the solid facts of society. . . . I do not mean merely that society must be studied by the imagination—that is true of all investigations in their higher reaches—but that the object of study is primarily an imaginative idea or group of ideas in the mind, that we have to imagine imaginations. The intimate grasp of any social fact will be found to require that we divine what men think of one another. Charity, for instance, is not understood without imagining what ideas the giver and recipient have of each other; to grasp homicide we must, for one thing, conceive how the offender thinks of his victim and of the administrators of law; the relation between the employing and hard-laboring classes is first of all a matter of personal attitude which we must apprehend by sympathy with both, and so on. . .

One's range of sympathy is a measure of his personality, indicating how much or how little of man he is. . . .

Hannah Arendt, "Understanding and Politics," quoted in Benjamin De Mott, Supergrow (New York: E. P. Dutton and Company, 1969), p. 166.

<sup>11</sup> Charles Horton Cooley, Human Nature and the Social Order (New York: Schocken Books, Inc., 1964).

Recommendations. We recommend the pursuit of two kinds of cross-disciplinary activities not only within the schools but within a variety of learning centers (See 'Where Can One Learn'):

- a. Learning about ecology should be fundamental from nursery school onward throughout the life of the learner. Although students of our vital interlock-life cycles have been warning the layman for years about profligacy with finite resources and his turn around ignorance of these crucial relationships, only recently has he begun to heed the warnings. Although Ottawa and the provinces are introducing more stringent legislation and a major world conference on pollution is planned for 1972 in Stockholm--such national and international actions may well be too late and too remote from the problem. Despite the midnight hour some experts believe knowledge may yet save. Schools and other sponsors of learning have no alternatives but to proceed as if the study of ecology can still make a difference--that the human species will continue, not become extinct. Persisting ignorance can mean death for us all. Required under these circumstances becomes too weak an adjective to convey the importance of this possibly life-giving and life-sustaining study immediately for all.
- b. For learners of all ages, aesthetic experiences should be arranged that enhance and expand the imagination. Certain activities should be required for all children during early childhood. In a recent essay, the American educator Benjamin De Mott excoriates American culture "for having consistently refused to introduce into its elementary educational systems those 'studies'--improvisation, mime, dance, dramatics--

that elsewhere in the West are accepted as the basic human efforts at developing an imagination of otherness." Canadian culture can also be included in this accusation. We recommend that all young children experience by participation, improvisation, mime, dance, dramatics, painting, sculpting, music and film making as a major part (at least one third) of their daily activities.

# Who Can Teach?

Our initial statement is that society's definition of who can teach must be dramatically enlarged if the needs of Albertans in the seventies are to be served.

younger, the definition of who among the elders is qualified to teach must enlarge. In his recent appearance before the United States House of Representatives' hearing on education, the author John Holt (How Children Learn, How Children Fail) stated that the adult resources of any community have not yet been widely enough tapped to educate the young. He proposed:

places where young people could come together and meet with older people who had all kinds of skill or knowledge about life and I don't mean just teachers, but doctors, lawyers, journalists, plumbers, carpenters who have an interest in communicating some of their ideas to children. I think these places would be very useful. 13

Benjamin De Mott, "American the Unimagining," Supergrow (New York: E. P. Dutton and Company, 1969), pp. 88-89.

<sup>13&</sup>lt;sub>"House Education Group Urged to Abolish High Schools," Seattle Post-Intelligencer, March 22, 1970, Section L, p. 7.</sub>

Second, co-figurative arrangements with peers teaching peers must be re-instated and developed. Re-instated is used rather than initiated because the notion of child as teacher can scarcely be regarded as an innovative concept when down the centuries and across almost all cultures, societies have given children the responsibility of caring for other children. In recent times, a common local manifestation has been formal education itself, for cannot the practice of using fifteen- and sixteen-year-olds as sole teachers in one-room school houses in Alberta in the 1800's be regarded as an examplar of co-figurative education? 14

Recent experiments in peer-teaching in many disciplines suggest that values accrue quite as much, if not more, for the young teacher as well as for the taught. Evidence is also growing that peer teaching (co-figurative) can be more effective than post-figurative teaching, particularly among adolescents where peer approval is one of the psychological facts of life. 16

<sup>14</sup> Once again, there is precedent in Alberta for cross-disciplining studies. Enterprise (the Alberta term for what Dewey called Activities) began in the schools in 1934 and 1935. The criticism made at the time enterprise was introduced obtained today. Although universities may have lengthened their teacher-training programs, they still do not provide adequate substantive training, nor has the concept of synthesizing knowledge, particularly across disciplines, been taught, much less stressed.

<sup>15</sup> John W. Landrum and Mary D. Martin, "When Students Teach Others," Educational Leadership, XXVII, 5 (February, 1970), pp. 446-448; Donald D. Durrell, Improving Reading Instruction (New York: Harcourt Brace and World, Inc., 1956), pp. 127-129; Janet Emig, The Composing Process of Twelfth Graders (Champaign, Illinois: National Council of Teachers of English Research, forthcoming 1970), monograph; Stanley Frager and Carolyn Stern, "Learning by Teaching," The Reading Teacher (Newark), Vol. 23, No. 5 (February, 1970), pp. 403-405.

<sup>16</sup> Urie Bronfenbrenner, Two Worldsof Children: The U.S. and U.S.S.R. (New York: Russell Sage Foundation, 1970).

Other major cultures are currently making wide and systematic use of peer teaching. In <u>Two Worlds of Childhood</u>: <u>The U.S. and U.S.S.R.</u>, the sociologist Urie Bronfenbrenner cites what he calls 'modelled teaching' in the "child collectives" of Russia:

Not only must she herself [the teacher] function as a motivating model, but it becomes her responsibility to seek out, organize, develop, and coordinate the activities of other appropriate models and reinforcing agents both within the classroom and outside.

Finally, if the above considerations are accepted as valid, they call for radical changes in our current practices of teacher-selection and -training. Specifically, they argue for the recruitment of persons on other than purely academic qualifications, with at least as much emphasis placed on social as on intellectual qualities and skills. For example, the research evidence indicates that learning is facilitated when the teacher is similar to the child in cultural background, race, and, especially in the case of boys, sex. 17

Third, the potentialities of pre-figurative arrangements, with younger teaching older, must be not only acknowledged but richly explored. Clearly, there will be lower limits to the age youthful teachers can be if they are to engage in formal or semi-formal interchanges with adults. (This is not to deny that the most powerful form of pre-figurative education will stay the myriad ways in which children educate their parents!)

We anticipate that our colleagues will immediately charge us with anti-professionalism. Such a charge is dependent upon a definition of what professionalism truly is and upon who a teacher is. We agree with the curriculum theorist Dwayne Huebner that a teacher is one who can both influence and be influenced and that these two characteristics are

<sup>17</sup> Bronfenbrenner, pp. 154-155.

as necessary as formal academic requirements.

The educational activity differs from other human encounters by this emphasis on influence, for clearly the educator is seen, and accepted, as a person who legitimately attempts to influence. However, he operates within the uniquely human endeavor of conversation, the giving and receiving of the word at the frontiers of each other's being. It is in conversation that the newness of each participant can come forth and the unconditioned can be revealed in new forms of gesture and language. The receptive listener frees the speaker to let the unformed merge into new awareness, and the interchange which follows has the possibility of moving both speaker and listener to new heights of being.

Educational activity is activity not only between man and man, however. It also involves activity between the student and other things in the world. The student encounters other people and natural and man-made phenomena. To these he has the ability to respond. Indeed, the education may be conceived to be the influencing of the student's response-ability. The student is introduced to the wealth and beauty of the phenomenal world, and is provided with the encouragement to test out his response-abilities until they call forth the meaning of what it is to be thrown into a world as a human being.

Here, then, are concepts which might possibly be used in an ethical rationality of educational activity: responseability, conversation, influence promise, and forgiveness. How can these concepts be used to explore the meanings of class activity?

First, the sanctity of response-ability and speech must be recognized. The human being with his finite freedom and his potential participation in the creation of the world, introduces newness and uniqueness into the world, and contributes to the unveiling of the unconditioned by the integrity of his personal, spontaneous responsiveness. His responses to the world in which he finds himself are tokens of his participation in this creative process, and must be accepted as such. Forcing responses into preconceived, conditioned responseability to existing forms of responsiveness denies others of their possibility of evolving new ways of existing. . .

The various disciplines--mathematics, biology, physics, history, sociology, visual arts, drama and others--are not only bodies of principles, concepts, generalizations and syntax to be learned. . . .

. . . The educator does try to influence, but with the optimism and faith in knowledge as a vehicle to new responseabilities and to new conversational possibilities. In essence, he says to the student, 'Look, with this knowledge I promise you, that you can find new wonders in the world; you can find new people who can interest you; and in so finding you can discover what you are and why you can become. In so doing you can help discover what man is, has been, and can be. With this knowledge I promise you, not enslavement, not a reduction of your power, but fulfillment and possibility and response-ability'. The real teacher feels this promise. He knows the tinge of excitement as the student finds new joys, new mysteries, new power, and new awareness that a full present leads to a future. Too often today, promise is replaced by demand, responsibility by expectations, and conversation by telling, asking and answering.

Finally, ethical rationality for thinking about educational activity provides the concept of forgiveness. This comes from the educator's awareness that with the power to influence is the power to be influenced. To avoid hubris, the educator must accept the possibility or error--error as he influences and as he has been influenced. Hence forgiveness becomes necessary as a way of freeing one's self and the other from the errors of the past. . . . With the possibility of forgiveness the student dares to express himself to leap into the unknown, and to respond with the totality of his being.

Because the educator dares to influence, he must have the courage to permeate classroom activity with the ever present possibility of forgiveness; for if he does not, his influence carries with it seeds of destruction through omniscience which can be only demonic.  $^{18}$ 

### Where Can One Learn?

Clearly, one who wants to learn learns wherever he and a person who wants to teach him have an encounter. It can be seen quickly by such a definition that many schools do not qualify as sites of learning

<sup>18</sup> James B. Macdonald and Robert R. Leeper (eds.), <u>Language and Meaning</u> (Washington: Association for Supervision and Curriculum Development, National Education Association, 1966), pp. 21-23.

since a double willingness is required--from learner as from teacher.

Also, so long as schools have so stringent a set of entrance requirements,

it is logical that many who want to learn and many who want to teach must

seek their encounters elsewhere.

The Province of Alberta might seriously consider the model established by such African countries as Uganda where learning and teaching are regarded as too important to be left to the schools. These governments sponsor learning centers where post-figurative encounters between children and adults in the community can readily occur (see John Holt's recommendation in 'Who Can Teach'). Learning centers could, equally or more importantly, be sites of co-figurative and pre-figurative encounters.

Recommendations. The Department of Education should sponsor, but not govern, learning centers for all manner of learning, informal as well as formal--making these centers indigenous and organic to whatever community they serve. The co-authors specifically recommend the use of indigenous schools still standing that were closed when consolidated schools were built within the town and cities.

### By What Modes Can We Learn?

If the psychologist Jerome Bruner is correct, there are three major modes of representation for any idea or problem or body of knowledge: <a href="majoretra">enactive</a> ("by a set of actions appropriate for achieving a certain result"), <a href="majoretra">iconic</a> ("by a set of summary images or graphics that stand for a concept without defining it fully"), and <a href="majoretra">symbolic</a> ("by a set of symbolic or logical propositions drawn from a symbolic system that is

governed by rules or laws for forming and transforming propositions"). 19
In most schools in Alberta, even in the elementary schools, the predominant mode of presentation is the symbolic—more specifically, the verbally symbolic. Yet what evidence do we have that Alberta children or any children learn most effectively through the exclusive use of the symbolic mode? Far more exploration of the values of the enactive and iconic modes must be undertaken.

## Recommendations.

- a. We recommend that scholars at the four universities and others who are interested explore immediately the values of the enactive and iconic modes, not only as they pertain to very young learners, but to learners of all ages.
- b. We recommend other basic inquiries as well--the values of heterogeneity and of homogeneity for various kinds of learning. There seems to be some evidence for the undeniable values of heterogeneity in many activities involving the arts, for example.
- c. We also recommend inquiries into the most propitious groupings for other kinds of learning activities.

We believe that a province so naturally wealthy as Alberta can arrange for the allocation of more funds for such crucial instances of basic and applied research.

Finally, we urge the province to free itself from all kinds of formal agencies and schools that inhibit rather than sponsor the full

<sup>&</sup>lt;sup>19</sup> Jerome S. Bruner, <u>Toward a Theory of Instruction</u> (Cambridge: Harvard University Press, 1966).

human growth of all learners in the province. Since we are all learners so long as we are alive, it is to our own best self-interests and the interests of the province to search restlessly and unendingly for ways to improve learning and to experiment fearlessly so that all may learn.